

ABSTRACT

A metal structure (600) for a bonding pad on integrated circuit wafers, which have interconnecting metallization (101) protected by an insulating layer (102) and selectively exposed by windows in the insulating layer. The structure comprises a patterned seed metal layer (104) positioned on the interconnecting metallization exposed by the window so that the seed metal establishes ohmic contact to the metallization as well as a practically impenetrable seal of the interface between the seed metal and the insulating layer. Further, a metal stud (301) is formed on the seed metal and aligned with the window. The metal stud is conformally covered by a barrier metal layer (501) and an outermost bondable metal layer (502).